

Watercourse	Reach number	Erosion Site Number	Photo Numbers		
Site Length (m)	Valley Wall or Bank Height (m)	Bankfull W (m)	Bankfull D (m)		
Observations Upstream					
Observations Downstream					
Items at Risk					
Site Description					
Land Use	Left Bank	Right Bank	Riparian Vegetation	Left Bank	Right Bank
Residential			None		
Commercial			Grass		
Industrial			Herbaceous		
Institutional			Shrubs		
Park/Open Space			Trees		
Other			Other		

Field Ranking Assessment

Distance to Risk	Stress	Erodibility	Resource Type	Extent of Damage	People at Risk
>30 m Score 2	Flow within Channel Score 5	Material Movement Score 5	Veg 2 RR/Gab 4 Arm Stn 6 B/B Prot 8	0-100 m ² Score 2	1-4 Score 2
20-30 m Score 4	Bank piping/ seepage Score 10	Material Defects Score 10	Prv Prop 10 Pub Trails 11 Pkg Lot 14 Prv Cros 16	101-200 m ² Score 4	5-9 Score 4
10-20 m Score 6	Erosive Flow Score 15	Backfill Exposed Score 15	Sewers 19 Road 21 Bridges 24	201-300 m ² Score 6	10-24 Score 6
0-10 m Score 8	Overtopping Flow Score 20	Undermining Score 20	Buildings Score 24	>300 m ² Score 8	25+ Score 8

Total Score: _____

Creek Inventory and Assessment Study Reach Summary Sheet

Reach	Treatments					Bed Material							Channel Type							Dominant Process			Floodplain Connection							
	Rip-rap	Gabions	Armourstone	Terrafix	Concrete	Other	Bedrock	Boulders	Cobbles	Gravel	Sand	Silt	Clay	Other	Alluvial	Rock bed	Rock controlled	Structural	Clay bed	Clay controlled	Semi-alluvial clay	Semi-alluvial structural	Ditch	Aggradation	Degradation	Widening	Planform Adjustment	Well connected	Connected	Mildly entrenched
Date	Avg Bankfull W					Avg Bankfull D			Photo Numbers				Notes																	
U/s Boundary						Downstream Boundary																								
Date	Avg Bankfull W					Avg Bankfull D			Photo Numbers				Notes																	
U/s Boundary						Downstream Boundary																								
Date	Avg Bankfull W					Avg Bankfull D			Photo Numbers				Notes																	
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Date	Avg Bankfull W					Avg Bankfull D			Photo Numbers				Notes																	
U/s Boundary						Downstream Boundary																								



Date _____

Reach _____

RAPID GEOMORPHIC ASSESSMENT

Watercourse:

Reach Boundaries:

Form/ Process	Geomorphic Indicator		Present		FactorValue
	no.	Description	No	Yes	
Evidence of Aggradation (AI)	1	Lobate bar			
	2	Coarse material in riffle embedded			
	3	Siltation in pools			
	4	Medial bars			
	5	Accretion on point bars			
	6	Poor longitudinal sorting of bed materials			
	7	Deposition in overbank zone			
Evidence of Degradation (DI)	1	Exposed bridge footings			
	2	Exposed sanitary/storm sewer/pipeline etc			
	3	Elevated stormsewer outfall			
	4	undermined gabion basket/concrete apron/etc			
	5	Scour pools d/s of culverts/stormsewers			
	6	Cut face on bar forms			
	7	Head cutting due to knick point migration			
	8	Terrace cut through older bar material			
	9	Suspended armor layer visible in bank			
	10	Channel worn into undisturbed overburden/bedrock			
Evidence of Widening (WI)	1	Fallen/leaning trees/fence posts/etc			
	2	Occurrence of large organic debris			
	3	Exposed tree roots			
	4	Basal scour on inside meander bends			
	5	Basal scour on both sides of channel through riffle			
	6	Gabion baskets/concrete walls/armour stone etc. out flanked			
	7	Length of basal scour > 50% through subject reach			
	8	Exposed length of previously buried pipe/cable etc.			
	9	Fracture lines along top of bank			
	10	Exposed building foundation			
Evidence of Planimetric Form Adjustment (PI)	1	Formation of chute(s)			
	2	Evolution of single thread channel to multiple channel			
	3	Evolution of pool-riffle form to low bed relief form			
	4	Cutoff channel(s)			
	5	Formation of island(s)			
	6	Thalweg alignment out of phase with meander geometry			
	7	Bar forms poorly formed/reworked/removed			
Stability Index (SI) = (AI+DI+WI+PI)/m				SI =	

Reach Description:

Aquafor Beech Limited Project _____ Date _____
 Watercourse _____ Reach _____ Length (m) _____ No. Photos _____

Rapid Stream Assessment Technique (RSAT)

RSAT Evaluation Category	General Verbal Rating Categories and Associated Point Range				
	Excellent	Good	Fair	Poor	Points
1. Channel stability	9-11	6-8	3-5	0-2	
2. Channel scouring/deposition	7-8	5-6	3-4	0-2	
3. Physical in-stream habitat	7-8	5-6	3-4	0-2	
4. Water quality	7-8	5-6	3-4	0-2	
5. Riparian Habitat conditions	6-7	4-5	2-3	0-2	
6. Biological indicators	7-8	5-6	3-4	0-2	

Total Points _____ Verbal Ranking _____ Total Score ____/50
 42-50 Excellent 30-41 Good 16-29 Fair < 16 Poor

SUPPLEMENTARY INFORMATION

Circle appropriate, underline dominant where applicable

Cross Section $W_{bf}(m)$ _____ $D_{bf}(m)$ _____ $W_{valley}(m)$ _____ **Entrenched** yes possibly no

Planform straight sinuous irregular meandering (regular irregular tortuous) braided

Substrate **Pools:** br bo co gr sa mu pm **Riffles:** br bo co ar gr sa mu pm
Transitions: br bo co gr sa mu pm wd **Parent Material:** BR CT CST SCT ST SaST Oth _____
Shape: rounded platy angular rod rip-rap **In channel:** boulders L _____ H _____ W _____ (cm)

Substrate: bedrock, boulder, cobble, armour, gravel, sand, mud (non-cohesive), parent material (cohesive)

Types of Parent Material (PM): bedrock, clay till, clay-silt till, silt-clay till, silt till, sandy-silt till, other.

Banks **Height:** (m) _____ **Angle:** 0 10 20 30 40 50 60 70 80 90+ circle range, underline average
Material: BR PM Alluvium (co gr sa si cl) Riprap rubble fill Other _____
Vegetation: tree shrub herb grass forbs --- bare 5 10 20 30 40 50 60 70 80 90 95 100 (%)
Rooting: deep shallow --- sparse moderate dense **Ditch Type:** _____ (Rhoads and Herrick)
Eroding banks: pools riffles slumping undercut 0 5 10 20 30 40 50 60 70 80 90 95 100 (%)
Impacts: none visible impacted buffer channel modification outfall Road Xing culvert bridge other _____

Comments: